Commonwealth of Kentucky Environmental and Public Protection Cabinet Department for Environmental Protection Division for Air Quality 803 Schenkel Lane Frankfort, Kentucky 40601 (502) 573-3382

Draft

AIR QUALITY PERMIT Issued under 401 KAR 52:020

Permittee Name: Griffin Industries, Inc. Mailing Address: 4221 Alexandria Pike

Cold Spring, Kentucky 41076

Source Name: Griffin Industries, Inc. Mailing Address: 4221 Alexandria Pike

Cold Spring, Kentucky 41076

Source Location: 1176 Bryan Griffin Road

Butler, Kentucky 41006

Permit ID: V-02-033 Revision 1

Agency Interest: 3408

Activity ID: APE20060001

Review Type: Title V/ Synthetic Minor

Source ID: 21-191-00007

Regional Office: Florence Regional Office

1508 Westen Avenue

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(270) 746-7475

County: Pendleton

Application

Complete Date: February 7, 2007 Issuance Date: June 30, 2003

Revision Date:

Expiration Date: June 30, 2008

John S. Lyons, Director Division for Air Quality

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	Permit type	Log or Activity#	Complete Date	Issuance Date	Summary of Action
V-02-033	Initial Issuance	Log # 50291	July 10, 2002	June 30, 2003	Initial Conditional Major Permit
V-02-033 R1	Revision 1	APE2006001	February 7, 2007		Added recycled cooking oil as fuel, removed EU 05, emissions cap on HCl, changed VOC emission cap to 225

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SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emission Units: 01 and 02 (Emission Point 01 and 02) Indirect Heat Exchangers

Description:

Two 800 HP Cleaver Brooks Horizontally Opposed Fired

Fuel: #6 fuel oil, "on spec" used oil, landfill gas, and recycled cooking oil

Maximum continuous rating: 33.5 MMBtu/hr each

Construction commenced: 1973

APPLICABLE REGULATIONS:

401 KAR 59:015, New indirect heat exchangers, applicable to an emissions unit with a capacity of less than 250 MMBtu/hr which commenced on or after April 9, 1972.

401 KAR 60:005, incorporating by reference 40 CFR 60, Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills.

40 CFR 279 Standards of Management of Used Oil and 40 CFR 761, PCBs Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions

NON-APPLICABLE REGULATIONS:

401 KAR 51:017, Prevention of Significant Deterioration of Air Quality, the permittee has elected to accept voluntary federally enforceable operating and emission limitations to preclude from the applicability of this standard.

40 CFR 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Institutional, Commercial, and Industrial Boilers and Process Heaters; applicability date of September 13, 2007. Permittee has elected to accept voluntary federally enforceable operating and emission limitations to preclude from applicability of these standards.

1. **Operating Limitations:**

- a. To preclude the applicability of 401 KAR 51:017, #6 fuel oil consumption of each unit shall not exceed 537,500 gallons per year on a twelve-month rolling total.
- b. To preclude the applicability of 401 KAR 51:017 and 40 CFR 63, Subpart DDDDD, "on spec" used oil consumption of each unit shall not exceed 525,000 gallons per year on a twelve-month rolling total.
- c. To preclude the applicability of 401 KAR 51:017, the sulfur content of each shipment of #6 fuel oil and "on spec" used oil shall not exceed 0.5 percent by weight per ASTM standards.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- d. Pursuant to 401 KAR 59:015 Section 4(1)(c), the ash content of each shipment of "on spec" used oil shall not exceed 0.77 percent by weight per ASTM standards.
- e. To preclude the applicability of 40 CFR 63, Subpart DDDDD the halogen content of each shipment of "on spec" used oil shall not exceed 800 ppm of Total Halogens.
- f. Pursuant to 40 CFR 60, Subpart WWW, the owner or operator of a combustion device who uses or purchases landfill gas for fuel in the combustion device shall use the gas only as a fuel, and venting of treated landfill gas to the ambient air is not allowed.

2. **Emission Limitations:**

- a. Pursuant to 401 KAR 59:015, Section 4(1)(c), particulate emissions shall not exceed 0.36 lb/MMBtu based on a three-hour average.
- b. Pursuant to 401 KAR 59:015, Section 4(2), emissions shall not exceed twenty (20) percent opacity based on a six minute average, except that a maximum of forty (40) percent opacity, based on a six-minute average, shall be permissible for not more than six (6) consecutive minutes in any consecutive sixty (60) minutes during cleaning the fire-box or blowing soot.
- c. Pursuant to 401 KAR 59:015, Section 5(1)(c), sulfur dioxide emissions shall not exceed 1.37 lb/MMBtu based on a twenty-four-hour average.
- d. Pursuant to 40 CFR 279 and 40 CFR 761, all "on spec" waste oil burned must meet the following conditions:

ON-SPEC USED OIL SPECIFICATIONS			
Constituent/Property	Allowable Level		
Arsenic	5 ppm maximum		
Cadmium	2 ppm maximum		
Chromium	10 ppm maximum		
Lead	100 ppm maximum		
Total halogens	900 ppm maximum		
Flash Point	100 °F minimum		

NOTE:

- (1) On-specification used oil maximum concentration of PCBs shall be less than 50 ppm.
- (2) *On-specification used oil* containing a PCB concentration greater than or equal to 2 ppm shall not be burned during startup or shutdown period.
 - e. See Section D for source-wide limitations.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:

a. The permittee may assure compliance with particulate and sulfur dioxide emissions by using the following formulas:

Particulate emissions = [EF×A (lbs/SCC units)] / [heating value of fuel (MMBtu/SCC units)]

Sulfur dioxide emissions = [EF×S (lbs/SCC units)] / [heating value of fuel (MMBtu/SCC units)]

EF = the latest AP-42 emission factor or emission factor determined from stack test data A = percent ash content of fuel, if applicable

S= percent sulfur content of fuel, if applicable

SCC units = MMscf for gases and 1000 gallons for liquids

b. The permittee shall demonstrate compliance with each of the above On Spec Used Oil Specifications by using approved EPA or ASTM test methods or a certified used oil analysis pursuant to 40 CFR 279 and 40 CFR 761.20. The analysis and recordkeeping shall apply to each amount prior to blending even if it is to be blended with ninety (90) percent virgin oil.

3. <u>Testing Requirements:</u>

None

4. **Specific Monitoring Requirements:**

- a. Pursuant to 401 KAR 52:020, Section 26, the permittee shall perform a qualitative visible observation of the opacity emissions from the stack on a daily basis and maintain a log of the observations. If visible emissions from the stack are seen, then the opacity shall be determined using EPA Reference Method 9 and if the opacity reading is greater than twenty (20) percent, then initiate an inspection of the equipment for any repairs.
- b. Pursuant to 401 KAR 52:020, Section 26, the permittee shall monitor the sulfur and heat content of each shipment of #6 fuel oil and "on spec" used oil and the ash content of "on spec" used oil. The permittee may use EPA or ASTM test methods or fuel supplier certification to meet this requirement.
- c. Pursuant to 401 KAR 52:020, Section 26, the permittee shall sample and analyze the recycled cooking oil and landfill gas burned in the boilers annually.
- d. Pursuant to 401 KAR 52:020, Section 26, the permittee shall monitor the heat content of the recycled cooking oil and landfill gas burned in the boilers annually.
- e. Pursuant to 401 KAR 52:020, Section 26, the permittee shall monitor the amount and type of each fuel burned on a monthly basis.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. **Specific Recordkeeping Requirements:**

- a. Pursuant to 401 KAR 52:020, Section 26, monthly logs of fuel usage shall be maintained as follows:
 - 1) The fuel usage log shall show the type and amount of fuels used each month. The permittee shall identify fuel by the number and/or type and fuel usage shall be expressed in gallons for liquids and standard cubic feet (scf) for gases. Material Safety Data Sheets (MSDS) and fuel analysis shall be maintained with the fuel usage log for all fuels purchased and used.
 - 2) All logs, MSDS sheets and fuel analysis records shall be kept on site for five (5) years from the date of the last entry and shall be made available, upon request, for inspection by the Cabinet or the U.S. EPA.
- b. Pursuant to 401 KAR 52:020 Section 26, records of the #6 fuel oil and "on spec" used oil sulfur and heat content, and ash content of "on-spec" used oil, per each shipment shall be maintained.
- c. Pursuant to 401 KAR 52:020, Section 26, records of sampling, analysis and heat content of recycled cooking oil and land fill gas shall be maintained.

6. **Specific Reporting Requirements:**

See Section F.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 03 (Emission Points 03 & 04)) Rendering process

Description:

Custom designed equipment by Griffin Industries, Inc.

Operating capacity: 28 tons/hr

Control Equipment: Venturi Scrubber/Packed Tower Scrubber (EP03), Room Air Scrubber (EP

04)

Construction commenced: 1983

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations, applicable to an emissions unit that commenced on or after July 2, 1975.

1. **Operating Limitations:**

None

2. Emission Limitations:

- a. Pursuant to 401 KAR 59:010, Section 3(2), particulate emissions from the stack shall not exceed [3.59(P)^{0.62}] pound per hour based on a three-hour average where P is the weekly average processing rate in tons per hour. If the process rate weight is 1,000 lbs/hr or less than the limit on particulate matter emissions is 2.34 lbs/hr.
- b. Pursuant to 401 KAR 59:010, Section 3(1)(a), any continuous emissions into the open air shall not exceed twenty (20) percent opacity based on a six-minute average.

Compliance Demonstration Method:

Compliance with the allowable particulate standard is demonstrated by utilizing the particulate performance test on the rendering process at the facility in February 2004. The average PT emissions were 0.23 lbs/hr, which is below the allowable rate even if the unit is processing 1,000 lbs/hr or less.

c. See Section D for source-wide limitations

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

a. Pursuant to 401 KAR 52:020, Section 26, the permittee shall perform a qualitative visible observation of the opacity emissions from the stack on a daily basis and maintain a log of the observations. If visible emissions from the stack are seen, then the opacity shall be determined by EPA Reference Method 9 and if the opacity reading is greater than 20 percent, then initiate an inspection of the equipment for any repairs.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. Pursuant to 401 KAR 52:020, Section 26, the permittee shall monitor the rendering process rate (tons) and hours of operation on a weekly basis.

5. Specific Recordkeeping Requirements:

- a. Pursuant to 401 KAR 52:020, Section 26, the permittee shall maintain weekly records of the hours of operation and the amount of rendering material processed.
- b. Pursuant to 401 KAR 52:020, Section 26, records regarding the maintenance of all scrubbers shall be maintained.

Specific Reporting Requirements:

See section F.

7. Specific Control Equipment Operating Conditions:

- a. The venturi scrubber, packed tower scrubber, and room air scrubber shall be operated to maintain compliance with permitted emission limitations in accordance with manufacturer's specifications and/or standard operating practices.
- b. See Section E.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 04 (Emission Point 03)

Indirect Heat Exchanger

Description:

Overfeed stoker – coal fired unit

Maximum continuous rating: 45.8 MMBtu/hr Control equipment: Mechanical collectors

Construction commenced: 1983

APPLICABLE REGULATIONS:

401 KAR 59:015, New indirect heat exchangers, applicable to an emissions unit with a capacity of less than 250 MMBtu/hr which commenced on or after April 9, 1972.

NON-APPLICABLE REGULATIONS:

40 CFR 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Institutional, Commercial, and Industrial Boilers and Process Heaters; applicability date of September 13, 2007. Permittee has elected to accept voluntary federally enforceable operating and emission limitations to preclude from applicability of these standards.

401 KAR 51:017, Prevention of Significant Deterioration of Air Quality, the permittee has elected to accept voluntary federally enforceable operating and emission limitations to preclude from the applicability of this standard.

1. Operating Limitations:

- a. To preclude the applicability of 401 KAR 51:017 and 40 CFR 63, Subpart DDDD, the coal consumption of the unit shall not exceed 9,000 tons per year on a twelvementh rolling total.
- b. To preclude the applicability of 401 KAR 51:017, the sulfur content of each shipment of coal shall not exceed 1.0 percent by weight.

2. Emission Limitations:

- a. Pursuant to 401 KAR 59:015, Section 4(1)(c), particulate emissions shall not exceed 0.32 lbs/MMBtu based on a three-hour average.
- b. Pursuant to 401 KAR 59:015, Section 4(2), visible emissions shall not exceed twenty (20) percent opacity based on a six minute average, except that a maximum of forty (40) percent opacity, based on a six-minute average, shall be permissible for not more than six (6) consecutive minutes in any consecutive sixty (60) minutes during cleaning the fire-box or blowing soot.
- c. Pursuant to 401 KAR 59:015, Section 5(1)(c), sulfur dioxide emissions shall not exceed 1.71 lbs/MMBtu based on a twenty-four-hour average.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:

The permittee may assure compliance with particulate and sulfur dioxide emissions by using the following formulas:

Particulate emissions = [16 (lbs/ton) / [heating value of coal (MMBtu/tons)]
Sulfur dioxide emissions = [38×S (lbs/tons)] / [heating value of coal (MMBtu/tons)]
S= percent sulfur content of coal

d. See Section D for source-wide limitations

3. <u>Testing Requirements:</u>

None

4. **Specific Monitoring Requirements:**

- a. Pursuant to 401 KAR 52:020, Section 26, the permittee shall perform a qualitative visible observation of the opacity emissions from the stack on a daily basis and maintain a log of the observations. If visible emissions from the stack are seen, then the opacity shall be determined by EPA Reference Method 9 and if the opacity reading is greater than 20 percent, then initiate an inspection of the equipment for any repairs.
- b. Pursuant to 401 KAR 52:020, Section 26, the permittee shall monitor the sulfur and heat content of each shipment of coal received. The permittee may use approved EPA or ASTM test methods or fuel supplier certification to meet this requirement.
- c. Pursuant to 401 KAR 52:020, Section 26, the permittee shall monitor the amount of coal burned on a monthly basis.

5. **Specific Recordkeeping Requirements:**

- a. Pursuant to 401 KAR 52:020, Section 26, the permittee shall keep records of coal burned on a monthly basis.
- b. Pursuant to 401 KAR 52:020, Section 26, records of sulfur content and heat content of coal for each shipment shall be maintained.
- c. Pursuant to 401 KAR 52:020, Section 26, records regarding the maintenance of the control equipment shall be maintained.

6. Specific Reporting Requirements:

See section F.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

7. Specific Control Equipment Operating Conditions:

- a. The mechanical collectors shall be operated to maintain compliance with permitted emission limitations in accordance with manufacturer's specifications and/or standard operating practices.
- b. See Section E.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 06 (Emission Points 06)

Raw material and blending stock unloading, storage, and loading to process feed hoppers

Description:

Operating rate: 60 tons/hr

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions is applicable to each affected facility which emits or may emit fugitive emissions and is not elsewhere subject to an opacity standard within the administrative regulations of the Division for Air Quality

1. **Operating Limitations:**

None

2. <u>Emission Limitations</u>:

- a. Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measure to suppress the dust emissions during handling.
- b. Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

3. Testing Requirements:

None

4. **Specific Monitoring Requirements:**

See Section F.

5. Specific Recordkeeping Requirements:

See Section F.

6. Specific Reporting Requirements:

See section F.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 07 (Emission Point 07)

Close-coupled gasification (CCG) unit and product dryer

Description:

CCG supplies heat to the dryer by burning sawdust or scrap packaging materials

Control equipment: Cyclone

Maximum heat input to CCG: 22.5 MMBtu/hr

Maximum feed rate of bakery scrap to dryer: 25 tons/hr

Construction Commenced: 1998

APPLICABLE REGULATIONS:

401 KAR 59:020, New incinerators, applicable for incinerators commenced after June 6, 1979 with a charging rate of fifty tons/day or less.

1. **Operating Limitations:**

Pursuant to 401 KAR 59:020, the CCG unit charging rate shall not exceed 50 tons per day of sawdust or scrap packing materials.

2. <u>Emission Limitations</u>:

- a. Pursuant to 401 KAR 59:020, Section 3(2)(a), particulate matter emissions from the CCG unit shall not exceed 0.23 g/dscm corrected to twelve (12) percent carbon dioxide excluding the contribution of carbon dioxide from auxiliary fuel.
- b. Pursuant to 401 KAR 59:020, Section 3(1), visible emission shall not exceed twenty (20) percent opacity based on a six-minute average.

Compliance Demonstration Method:

Compliance with the allowable particulate standard is demonstrated by utilizing PT performance test on the bakery scrap process at Griffin's Henderson, KY facility in January 2004. The average PT emissions were 1.67 lbs/hr.

d. See Section D for source-wide limitations.

Compliance Demonstration for the Bakery/Dryer Oven VOC Emissions:

AP-42 Formula:

VOC Emission Factor (lbs/ton) = 0.95Yi+0.195ti-+1.90

VOC Emissions (ton/month) = [VOC E.F. (lbs/ton)] * [yeast containing dough (ton/month)] / [2000 lbs]

VOC E.F. = Pounds VOC per ton of yeast containing dough

Yi = Initial baker's percent of yeast

ti = Total yeast action time in hours

Example calculation to be performed for each shipment received of yeast containing dough per month:

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

VOC Factor = 0.95(2.3) + 0.195(49.3) + 1.90 = 13.9 lb VOC/ton yeast containing dough

$$\left(\frac{13.9 \ lb \ VOC}{ton \ dough}\right) \times \left(\frac{7122 \ ton \ dough}{month}\right) \times \left(\frac{ton}{2000 \ lb}\right) = \frac{48.78 \ tons \ VOC}{month}$$

3. Testing Requirements:

None

4. **Specific Monitoring Requirements:**

- a. Pursuant to 401 KAR 52:020, Section 26, the permittee shall perform a qualitative visible observation of the opacity emissions from the stack on a daily basis and maintain a log of the observations. If visible emissions from the stack are seen, then the opacity shall be determined by EPA Reference Method 9 and if the opacity reading is greater than 20 percent, then initiate an inspection of the equipment for any repairs.
- b. Pursuant to 401 KAR 52:020, Section 26, the permittee shall monitor the amount of scrap packaging and sawdust used in the CCG unit, bakery products processed in the dryer, and the hours of operation on a daily basis.

5. **Specific Recordkeeping Requirements:**

- a. Pursuant to 401 KAR 52:020, Section 26, the permittee shall maintain records of scrap packaging and sawdust used in the CCG unit, bakery products processed in the dryer, and hours of operation on a daily basis.
- b. Pursuant to 401 KAR 52:020, Section 26, records regarding the maintenance of all scrubbers shall be maintained.

6. Specific Reporting Requirements:

See section F.

7. Specific Control Equipment Operating Conditions:

- a. The cyclone shall be operated to maintain compliance with permitted emission limitations in accordance with manufacturer's specifications and/or standard operating practices.
- b. See Section E

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 08 (Emission Point 08)

Product and blending stock mixing, size reduction, and storage

Description:

Operating rate: 46.2 tons/hr

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations, applicable to an emissions unit that commenced on or after July 2, 1975.

1. **Operating Limitations:**

None

2. <u>Emission Limitations</u>:

- a. Pursuant to 401 KAR 59:010, Section 3(3), particulate emissions from the stack shall not exceed [3.59(P)^{0.62}] pound per hour based on a three-hour average where P is the weekly average processing rate in tons per hour. If the process rate weight is 1,000 lbs/hr or less than the limit on particulate matter emissions is 2.34 lbs/hr.
- b. Pursuant to 401 KAR 50:010, Section 3(1)(a), any continuous emissions into the open air shall not equal or exceed twenty (20) percent opacity based on a six-minute average.

Compliance Demonstration Method:

Compliance with the allowable particulate standard can be demonstrated by the following formula:

Particulate emissions = [EF (lbs/ton)] * [P (tons/hr)]

EF = the latest AP-42 emission factor

P = weekly average processing rate

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

The permittee shall monitor the mixing and storage rate (tons) and hours of operation on a weekly basis.

5. Specific Recordkeeping Requirements:

Records of weekly mixing and storage process and hours of operation shall be maintained.

6. Specific Reporting Requirements:

See section F.

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 09 (Emission Points 09)

Product loadout

Description:

Operating rate: 46.2 tons/hr

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions is applicable to each affected facility which emits or may emit fugitive emissions and is not elsewhere subject to an opacity standard within the administrative regulations of the Division for Air Quality.

1. **Operating Limitations:**

None

2. <u>Emission Limitations</u>:

- a. Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.
- b. Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

3. <u>Testing Requirements</u>:

None

4. Specific Monitoring Requirements:

See Section F.

5. Specific Recordkeeping Requirements:

See Section F.

Specific Reporting Requirements:

See section F.

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SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

Description

Generally Applicable Regulation

	<u>Description</u> <u>Ger</u>	iciany Applicable	Regulation
1.	Storage vessels associated with fuel oil storage and voperations.	ehicle refueling	N/A
2.	Storage vessels containing inorganic aqueous liquids not include inorganic acids with boiling points below storage temperature at atmospheric temperature.		N/A
3.	Laboratory fume hoods and vents used exclusively for physical analysis	or chemical	N/A
4.	No. 2 oil-fired space heaters rated at less then 2.0 MN actual heat input.	MBtu/hr,	N/A
5.	Degreasing operations (parts-washers used in routine which does not exceed 145 gallons per month	maintenance)	N/A
6.	Wastewater treatment activities with streams contain 1% oil and grease content by volume.	ing less than	N/A
7.	Use of paved haul roads and parking lots.		401 KAR 63:010
8.	Boiler and cooling tower blowdown operations.		401 KAR 63:010
9.	Farming operations (harvest of hay from spray irrigation)	tion systems)	N/A
10	. Routine facility maintenance.		N/A
11	. Coal handling		401 KAR 63:010
12	. Cooling Tower		401 KAR 63:010

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

- 2. Particulate matter, sulfur dioxide, volatile organic compounds, hydrogen chloride, and visible emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.
- 3. To preclude the applicability of 401 KAR 51:017, Prevention of Significant Deterioration of Air Quality, total source-wide sulfur dioxide emissions shall not exceed 225 tons per year based on a twelve month rolling total. The permittee shall determine source-wide sulfur dioxide emissions by calculating monthly emission totals using the most recent AP-42 stack test results, and/or fuel analysis data; and maintain a rolling 12-month total.
- 4. To preclude the applicability of 40 CFR 63 Subpart DDDDD, National Emission standards for Institutional, Commercial, and Industrial Boilers and Process Heaters applicability date of September 13, 2007, total source-wide emissions of hydrogen chloride shall not exceed 9.0 tons per year based on a twelve month rolling total and source-wide emission of combined HAPs shall not exceed 22.5 tons per year based on a twelve month rolling total. The permittee shall determine source-wide hydrogen chloride and combined HAPs emissions by calculating monthly emission totals using the most recent AP-42 emission factors, stack test information and fuel analysis data as applicable, and maintain a twelve-month rolling total.
- 5. To preclude the applicability of 401 KAR 51:017, Prevention of Significant Deterioration of Air Quality, total source-wide VOC emissions shall not exceed 225 tons per year based on a 12-month rolling total. The permittee shall determine source-wide VOC emissions by calculating monthly emission totals using the most recent AP-42 emission factors (including the American Institute of Baking formula), stack test results, and/or fuel analysis data; and maintain a rolling twelve month total.

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SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:

- a. Date, place as defined in this permit, and time of sampling or measurements;
- b. Analyses performance dates;
- c. Company or entity that performed analyses;
- d. Analytical techniques or methods used;
- e. Analyses results; and
- f. Operating conditions during time of sampling or measurement.
- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b-IV-2 and 1a-8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit:
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.

- 7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
- 8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

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SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality

Florence Regional Office

8020 Veterans Memorial Dr.

Florence, KY 41042

U.S. EPA Region 4

Air Enforcement Branch

Atlanta Federal Center

61 Forsyth St.

Atlanta, GA 30303-8960

Division for Air Quality Central Files 803 Schenkel Lane Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.

SECTION G - GENERAL PROVISIONS

1. General Compliance Requirements

a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 Section 3(1)(b) and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].

- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - (2) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
 - (4) New requirements become applicable to a source subject to the Acid Rain Program.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 7 and 8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020 Section 3(1)(c)].

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SECTION G - GENERAL PROVISIONS (CONTINUED)

f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- i. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens. [Section 1a-15-b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
- 1. This permit does not convey property rights or exclusive privileges [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].

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SECTION G - GENERAL PROVISIONS (CONTINUED)

p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

- q. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of a permit shall be considered compliance with:
 - (1) Applicable requirements that are included and specifically identified in the permit and
 - (2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
- b. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

3. Permit Revisions

- a. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- c. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

4. Construction, Start-Up, and Initial Compliance Demonstration Requirements

No construction authorized by this permit.

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SECTION G - GENERAL PROVISIONS (CONTINUED)

5. <u>Testing Requirements</u>

a. Pursuant to 401 KAR 50:045 Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

- b. Pursuant to 401 KAR 50:045 Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

- a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.
- b. The permittee shall comply with all applicable requirements and conditions of the Acid Rain Permit and the Phase II permit application (including the Phase II NOx compliance plan and averaging plan, if applicable) incorporated into the Title V permit issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

7. Emergency Provisions

- a. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - (1) An emergency occurred and the permittee can identify the cause of the emergency;

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SECTION G - GENERAL PROVISIONS (CONTINUED)

(2) The permitted facility was at the time being properly operated;

- (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
- (4) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- (5) This requirement does not relieve the source of other local, state or federal notification requirements.
- b. Emergency conditions listed in General Condition G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
- c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

8. Ozone Depleting Substances

- a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
 - (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

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SECTION G - GENERAL PROVISIONS (CONTINUED)

9. Risk Management Provisions

a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center P.O. Box 1515 Lanham-Seabrook, MD 20703-1515.

b. If requested, submit additional relevant information to the Division or the U.S. EPA.